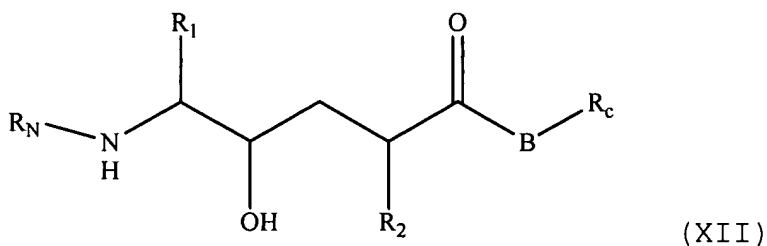


1-48. (Canceled)

49. (Currently Amended) A method for treating ~~or preventing~~ a disease characterized by beta-amyloid deposits in the brain comprising administering to a patient an effective therapeutic amount of a hydroxyethylene compound of the formula



where R_1 is:

- (I) C_1 - C_6 alkyl, unsubstituted or substituted with one, two or three C_1 - C_3 alkyl, -F, -Cl, -Br, -I, -OH, - NH_2 , - $C\equiv N$, - CF_3 , or - N_3 ,
- (II) $-(CH_2)_{1-2}-S-CH_3$,
- (III) $-CH_2-CH_2-S-CH_3$,
- (IV) $-CH_2-(C_2-C_6 \text{ alkenyl})$ unsubstituted or substituted by one -F,
- (V) $-(CH_2)_{0-3}-(R_{1-aryl})$ where R_{1-aryl} is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, tetralinyl unsubstituted or substituted on the aryl ring with one or two of the following substituents which can be the same or different:
 - (A) C_1 - C_3 alkyl,
 - (B) $-CF_3$,
 - (C) -F, Cl, -Br and -I,

(D) C₁-C₃ alkoxy,

(E) -O-CF₃,

(F) -NH₂,

(G) -OH, or

(H) -C≡N,

(VI) -(CH₂)_{n1}-(R₁-heteroaryl) where n₁ is 0, 1, 2, or 3 and

R₁-heteroaryl is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,
 (Z) furanyl,
 (AA) thienyl,
 (BB) pyrrolyl,
 (CC) oxadiazolyl,
 (DD) thiadiazolyl,
 (EE) triazolyl,
 (FF) tetrazolyl,
 (GG) 1, 4-benzodioxan
 (HH) purinyl,
 (II) oxazolopyridinyl,
 (JJ) imidazopyridinyl,
 (KK) isothiazolyl,
 (LL) naphthyridinyl,
 (MM) cinnolinyl,
 (NN) carbazolyl,
 (OO) β -carbolinyl,
 (PP) isochromanyl,
 (QQ) chromanyl,
 (RR) furazanyl,
 (SS) tetrahydroisoquinoline,
 (TT) isoindolinyl,
 (UU) isobenzotetrahydrofuranyl,
 (VV) isobenzotetrahydrothienyl,
 (WW) isobenzothiophenyl,
 (XX) benzoxazolyl, or
 (YY) pyridopyridinyl,

where the R_1 -heteroaryl group is bonded to $-(CH_2)_{0-3}-$ by any ring atom of the parent R_N -heteroaryl group substituted by hydrogen such that the new bond to the R_1 -heteroaryl group replaces the hydrogen atom

and its bond, where heteroaryl is unsubstituted or substituted with one or two:

- (1) C₁-C₃ alkyl,
- (2) -CF₃,
- (3) -F, Cl, -Br, or -I,
- (4) C₁-C₃ alkoxy,
- (5) -O-CF₃,
- (6) -NH₂,
- (7) -OH, or
- (8) -C≡N,

with the proviso that when n₁ is zero R₁-heteroaryl is not bonded to the carbon chain by nitrogen, or

(VII) -(CH₂)_{n1}-(R₁-heterocycle) where n₁ is as defined above

and

R₁-heterocycle is:

- (A) morpholinyl,
- (B) thiomorpholinyl,
- (C) thiomorpholinyl S-oxide,
- (D) thiomorpholinyl S,S-dioxide,
- (E) piperazinyl,
- (F) homopiperazinyl,
- (G) pyrrolidinyl,
- (H) pyrrolinyl,
- (I) tetrahydropyranyl,
- (J) piperidinyl,
- (K) tetrahydrofuranyl, or
- (L) tetrahydrothiophenyl,

where the R₁-heterocycle group is bonded by any atom of the parent R₁-heterocycle group substituted by hydrogen such that the new bond to the R₁-heteroaryl group replaces the hydrogen atom and its bond, where heterocycle is unsubstituted or substituted with one or

two:

- (1) =O,
- (2) C₁-C₃ alkyl,
- (3) -CF₃,
- (4) -F, Cl, -Br and -I,
- (5) C₁-C₃ alkoxy,
- (6) -O-CF₃,
- (7) -NH₂,
- (8) -OH, or
- (9) -C≡N,

with the proviso that when n₁ is zero R₁-heterocycle is not bonded to the carbon chain by nitrogen;

where R₂ is:

- (I) -H,
- (II) C₁-C₆ alkyl, or
- (III) -(CH₂)₀₋₄-R₂₋₁ where R₂₋₁ is (C₃-C₆)cycloalkyl, R₁-aryl or R₁-heteroaryl where R₁-aryl and R₁-heteroaryl are as defined above,

where R_N is:

- (I) R_{N-1}-X_N- where X_N is:
 - (A) -CO-,
 - (B) -SO₂-,
 - (C) -(CR'R'')₁₋₆ where R' and R'' are the same or different and are -H or C₁-C₄ alkyl,
 - (D) -CO-(CR'R'')₁₋₆-X_{N-1} where X_{N-1} is -O-, -S- and -NR'R''- and where R' and R'' are as defined above,
 - (E) a single bond;

where R_{N-1} is:

- (A) R_{N-aryl} where R_{N-aryl} is phenyl, 1-naphthyl and 2-naphthyl unsubstituted or substituted with

one, two, three or four of the following substituents which can be the same or different and are:

- (1) C₁-C₆ alkyl,
- (2) -F, -Cl, -Br, or -I,
- (3) -OH,
- (4) -NO₂,
- (5) -CO-OH,
- (6) -C≡N,
- (7) -CO-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are:
 - (a) -H,
 - (b) -C₁-C₆ alkyl unsubstituted or substituted with one
 - (i) -OH, or
 - (ii) -NH₂,
 - (c) -C₁-C₆ alkyl unsubstituted or substituted with one to three -F, -Cl, -Br, or -I,
 - (d) -C₃-C₇ cycloalkyl,
 - (e) -(C₁-C₂ alkyl)-(C₃-C₇ cycloalkyl),
 - (f) -(C₁-C₆ alkyl)-O-(C₁-C₃ alkyl),
 - (g) -C₁-C₆ alkenyl with one or two
 - (h) -C₁-C₆ alkynyl with one or two
 - (i) -C₁-C₆ alkyl chain with one double bond and one triple bond,
 - (j) -R_{1-aryl} where R_{1-aryl} is as defined

double bonds,

triple bonds,

above, or

(k) $-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,

(8) $-\text{CO}-(\text{C}_3\text{-C}_{12} \text{ alkyl})$,

(9) $-\text{CO}-(\text{C}_3\text{-C}_6 \text{ cycloalkyl})$,

(10) $-\text{CO}-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,

(11) $-\text{CO}-R_1\text{-heterocycle}$ where $R_1\text{-heterocycle}$ is as defined above,

(12) $-\text{CO}-R_{N-4}$ where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with one or two $\text{C}_1\text{-C}_3$ alkyl,

(13) $-\text{CO}-\text{O}-R_{N-5}$ where R_{N-5} is:

(a) $\text{C}_1\text{-C}_6$ alkyl, or

(b) $-(\text{CH}_2)_{0-2}-(R_1\text{-aryl})$ where $R_1\text{-aryl}$ is as defined above,

(14) $-\text{SO}_2\text{-NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,

(15) $-\text{SO}-(\text{C}_1\text{-C}_8 \text{ alkyl})$,

(16) $-\text{SO}_2-(\text{C}_3\text{-C}_{12} \text{ alkyl})$,

(17) $-\text{NH}-\text{CO}-\text{O}-R_{N-5}$ where R_{N-5} is as defined above,

(18) $-\text{NH}-\text{CO}-\text{N}(\text{C}_1\text{-C}_3 \text{ alkyl})_2$,

(19) $-\text{N}-\text{CS}-\text{N}(\text{C}_1\text{-C}_3 \text{ alkyl})_2$,

(20) $-\text{N}(\text{C}_1\text{-C}_3 \text{ alkyl})-\text{CO}-R_{N-5}$ where R_{N-5} is as defined above,

(21) $-\text{NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) $-R_{N-4}$ where R_{N-4} is as defined above,

- (23) -O-CO-(C₁-C₆ alkyl),
- (24) -O-CO-N(C₁-C₃ alkyl)₂,
- (25) -O-CS-N(C₁-C₃ alkyl)₂,
- (26) -O-(C₁-C₆ alkyl),
- (27) -O-(C₂-C₅ alkyl)-COOH,
- (28) -S-(C₁-C₆ alkyl),
- (29) C₁-C₆ alkyl unsubstituted or substituted
with 1, 2, 3, 4, or 5 -F,
- (30) -O-(C₁-C₆ alkyl unsubstituted or
substituted with 1, 2, 3, 4, or 5 -F, or
- (31) -O- ϕ ,

(B) -R_N-heteroaryl where R_N-heteroaryl is:

- (A) pyridinyl,
- (B) pyrimidinyl,
- (C) quinolinyl,
- (D) indenyl,
- (E) indanyl,
- (F) benzothiophenyl,
- (G) indolyl,
- (H) indolinyl,
- (I) pyridazinyl,
- (J) pyrazinyl,
- (K) isoindolyl,
- (L) isoquinolyl,
- (M) quinazolinyl,
- (N) quinoxalinyl,
- (O) phthalazinyl,
- (P) imidazolyl,
- (Q) isoxazolyl,
- (R) pyrazolyl,
- (S) oxazolyl,

(T) thiazolyl,
(U) indolizinyll,
(V) indazolyl,
(W) benzothiazolyl,
(X) benzimidazolyl,
(Y) benzofuranyl,
(Z) furanyl,
(AA) thienyl,
(BB) pyrrolyl,
(CC) oxadiazolyl,
(DD) thiadiazolyl,
(EE) triazolyl,
(FF) tetrazolyl,
(GG) 1, 4-benzodioxan
(HH) purinyl,
(II) oxazolopyridinyl,
(JJ) imidazopyridinyl,
(KK) isothiazolyl,
(LL) naphthyridinyl,
(MM) cinnolinyl,
(NN) carbazolyl,
(OO) β -carbolinyl,
(PP) isochromanyl,
(QQ) chromanyl,
(RR) furazanyl,
(SS) tetrahydroisoquinoline,
(TT) isoindolinyl,
(UU) isobenzotetrahydrofuranyl,
(VV) isobenzotetrahydrothienyl,
(WW) isobenzothiophenyl,
(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the R_N -heteroaryl group is bonded by any atom of the parent R_N -heteroaryl group substituted by hydrogen such that the new bond to the R_N -heteroaryl group replaces the hydrogen atom and its bond, where heteroaryl is unsubstituted or substituted with one or two:

- (1) C_1 - C_6 alkyl,
- (2) -F, -Cl, -Br, or -I,
- (3) -OH,
- (4) -NO₂,
- (5) -CO-OH,
- (6) -C≡N,
- (7) -CO-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are:
 - (a) -H,
 - (b) - C_1 - C_6 alkyl unsubstituted or substituted with one
 - (i) -OH, or
 - (ii) -NH₂,
 - (c) - C_1 - C_6 alkyl unsubstituted or substituted with 1, 2, or 3 -F, -Cl, -Br, or -I,
 - (d) - C_3 - C_7 cycloalkyl,
 - (e) -(C_1 - C_2 alkyl)-(C_3 - C_7 cycloalkyl),
 - (f) -(C_1 - C_6 alkyl)-O-(C_1 - C_3 alkyl),
 - (g) - C_1 - C_6 alkenyl with one or two double bonds,
 - (h) - C_1 - C_6 alkynyl with one or two triple bonds,

- (i) $-C_1-C_6$ alkyl chain with one double bond and one triple bond,
- (j) $-R_1\text{-aryl}$ where $R_1\text{-aryl}$ is as defined above, or
- (k) $-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,
- (8) $-\text{CO}-(C_3-C_{12} \text{ alkyl})$,
- (9) $-\text{CO}-(C_3-C_6 \text{ cycloalkyl})$,
- (10) $-\text{CO}-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,
- (11) $-\text{CO}-R_1\text{-heterocycle}$ where $R_1\text{-heterocycle}$ is as defined above,
- (12) $-\text{CO}-R_{N-4}$ where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with one or two C_1-C_3 alkyl,
- (13) $-\text{CO}-O-R_{N-5}$ where R_{N-5} is:
 - (a) C_1-C_6 alkyl, or
 - (b) $-(CH_2)_{0-2}-(R_1\text{-aryl})$ where $R_1\text{-aryl}$ is as defined above,
- (14) $-\text{SO}_2-\text{NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,
- (15) $-\text{SO}-(C_1-C_8 \text{ alkyl})$,
- (16) $-\text{SO}_2-(C_3-C_{12} \text{ alkyl})$,
- (17) $-\text{NH}-\text{CO}-O-R_{N-5}$ where R_{N-5} is as defined above,
- (18) $-\text{NH}-\text{CO}-N(C_1-C_3 \text{ alkyl})_2$,
- (19) $-\text{N}-\text{CS}-N(C_1-C_3 \text{ alkyl})_2$,

- (20) $-N(C_1-C_3 \text{ alkyl})-CO-R_{N-5}$ where R_{N-5} is as defined above,
- (21) $-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,
- (22) $-R_{N-4}$ where R_{N-4} is as defined above,
- (23) $-O-CO-(C_1-C_6 \text{ alkyl})$,
- (24) $-O-CO-N(C_1-C_3 \text{ alkyl})_2$,
- (25) $-O-CS-N(C_1-C_3 \text{ alkyl})_2$,
- (26) $-O-(C_1-C_6 \text{ alkyl})$,
- (27) $-O-(C_2-C_5 \text{ alkyl})-COOH$, or
- (28) $-S-(C_1-C_6 \text{ alkyl})$,
- (C) $-R_{N-aryl}-R_{N-aryl}$ where $-R_{N-aryl}$ is as defined above,
- (D) $-R_{N-aryl}-R_{N-heteroaryl}$ where $-R_{N-aryl}$ and $-R_{N-heteroaryl}$ are as defined above,
- (E) $-R_{N-heteroaryl}-R_{N-aryl}$ where $-R_{N-aryl}$ and $-R_{N-heteroaryl}$ are as defined above,
- (F) $-R_{N-heteroaryl}-R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,
- (G) $-R_{N-aryl}-O-R_{N-aryl}$ where $-R_{N-aryl}$ is as defined above,
- (H) $-R_{N-aryl}-S-R_{N-aryl}$ where $-R_{N-aryl}$ is as defined above,
- (I) $-R_{N-heteroaryl}-O-R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,
- (J) $-R_{N-heteroaryl}-S-R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,
- (K) $-R_{N-aryl}-CO-R_{N-aryl}$ where $-R_{N-aryl}$ is as defined above,

(L) $-R_N\text{-aryl-CO-}R_N\text{-heteroaryl}$ where $-R_N\text{-aryl}$ and $R_N\text{-heteroaryl}$ are as defined above,

(M) $-R_N\text{-aryl-SO}_2\text{-}R_N\text{-aryl}$ where $-R_N\text{-aryl}$ is as defined above,

(N) $-R_N\text{-heteroaryl-CO-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,

(O) $-R_N\text{-heteroaryl-SO}_2\text{-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,

(P) $-R_N\text{-aryl-O-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-aryl}$ is as defined above,

(Q) $-R_N\text{-aryl-S-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-aryl}$ is as defined above,

(R) $-R_N\text{-heteroaryl-O-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-heteroaryl}$ is as defined above, or

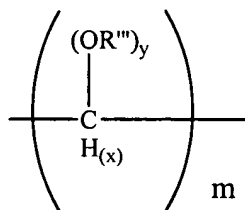
(S) $-R_N\text{-heteroaryl-S-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-heteroaryl}$ is as defined above,

(II) $A\text{-X}_N\text{-}$ where X_N is $-\text{CO-}$,

wherein A is

(A) $-\text{T-E-(Q)}_m\text{'}$,

(1) where $-\text{T}$ is



where

(a) $x = 1$ when $y = 1$ and $x = 2$ when $y = 0$,

(b) m is 0, 1, 2 or 3,

- (c) the values of x and y vary independently on each carbon when m is 2 and 3, and
- (d) R''' varies independently on each carbon and is H, (C₁-C₂) alkyl, phenyl, or phenyl(C₁-C₃)alkyl;

(2) -E is

(a) C₁-C₅ alkyl, but only if m' does not equal 0,

- (b) methylthioxy(C₂-C₄)alkyl,
- (c) an aryl group having 5 to 7 atoms when monocyclic or having 8 to 12 atoms when fused,
- (d) a heterocyclic group having 5 to 7 atoms when monocyclic or having 8 to 12 atoms when fused,
- (e) a mono or fused ring cycloalkyl group having 5 to 10 carbon atoms,
- (f) biphenyl,
- (g) diphenyl ether,
- (h) diphenylketone,
- (i) phenyl(C₁-C₈)alkyloxyphenyl, or
- (j) C₁-C₆ alkoxy;

(3) -Q is

- (a) C₁-C₃ alkyl,
- (b) C₁-C₃ alkoxy,
- (c) C₁-C₃ alkylthioxy,
- (d) C₁-C₆ alkylacylamino,
- (e) C₁-C₆ alkylacyloxy,

- (f) amido (including primary, C₁-C₆ alkyl and phenyl secondary and tertiary amino moieties),
 - (g) C₁-C₆ alkylamino
 - (h) phenylamino,
 - (i) carbamyl (including C₁-C₆ alkyl and phenyl amides and esters),
 - (j) carboxyl (including C₁-C₆ alkyl and phenyl esters),
 - (k) carboxy(C₂-C₅)alkoxy,
 - (l) carboxy(C₂-C₅)alkylthioxy,
 - (m) heterocyclacyl,
 - (n) heteroarylacyl, or
 - (o) hydroxyl;
- (4) m' is 0, 1, 2 or 3;

(B) -E(Q)_{m'}, wherein E and -Q are as defined as above and m' is 0, 1, 2, or 3;

(C) -T-E wherein -E and -Q are as defined as above; or

(D) -E wherein -E is as defined as above;

(III) -CO-(C₁-C₆ alkyl) where alkyl is unsubstituted or substituted with one or two:

- (A) -OH,
- (B) -C₁-C₆ alkoxy,
- (C) -C₁-C₆ thioalkoxy,
- (D) -CO-O-R_{N-8} where R_{N-8} is -H, C₁-C₆ alkyl or - ϕ ,
- (E) -CO-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are as defined above,
- (F) -CO-R_{N-4} where R_{N-4} is as defined above,
- (G) -SO₂-(C₁-C₈ alkyl),

- (H) $-\text{SO}_2-\text{NR}_{\text{N}-2}\text{R}_{\text{N}-3}$ where $\text{R}_{\text{N}-2}$ and $\text{R}_{\text{N}-3}$ are the same or different and are as defined above,
 - (I) $-\text{NH}-\text{CO}-(\text{C}_1-\text{C}_6 \text{ alkyl}),$
 - (J) $-\text{NH}-\text{CO}-\text{O}-\text{R}_{\text{N}-8}$ where $\text{R}_{\text{N}-8}$ is as defined above,
 - (K) $-\text{NR}_{\text{N}-2}\text{R}_{\text{N}-3}$ where $\text{R}_{\text{N}-2}$ and $\text{R}_{\text{N}-3}$ are the same or different and are as defined above,
 - (L) $-\text{R}_{\text{N}-4}$ where $\text{R}_{\text{N}-4}$ is as defined above,
 - (M) $-\text{O}-\text{CO}-(\text{C}_1-\text{C}_6 \text{ alkyl}),$
 - (N) $-\text{O}-\text{CO}-\text{NR}_{\text{N}-8}\text{R}_{\text{N}-8}$ where the $\text{R}_{\text{N}-8}$ is the same or different and are as defined above, or
 - (O) $-\text{O}-(\text{C}_1-\text{C}_5 \text{ alkyl})-\text{COOH},$
- (IV) $-\text{CO}-(\text{C}_1-\text{C}_3 \text{ alkyl})-\text{O}-(\text{C}_1-\text{C}_3 \text{ alkyl})$ where alkyl is unsubstituted or substituted with one or two
- (A) $-\text{OH},$
 - (B) $-\text{C}_1-\text{C}_6 \text{ alkoxy},$
 - (C) $-\text{C}_1-\text{C}_6 \text{ thioalkoxy},$
 - (D) $-\text{CO}-\text{O}-\text{R}_{\text{N}-8}$ where $\text{R}_{\text{N}-8}$ is $-\text{H}$, $\text{C}_1-\text{C}_6 \text{ alkyl}$ or $-\phi$,
 - (E) $-\text{CO}-\text{NR}_{\text{N}-2}\text{R}_{\text{N}-3}$ where $\text{R}_{\text{N}-2}$ and $\text{R}_{\text{N}-3}$ are the same or different and are as defined above,
 - (F) $-\text{CO}-\text{R}_{\text{N}-4}$ where $\text{R}_{\text{N}-4}$ is as defined above,
 - (G) $-\text{SO}_2-(\text{C}_1-\text{C}_8 \text{ alkyl}),$
 - (H) $-\text{SO}_2-\text{NR}_{\text{N}-2}\text{R}_{\text{N}-3}$ where $\text{R}_{\text{N}-2}$ and $\text{R}_{\text{N}-3}$ are the same or different and are as defined above,
 - (I) $-\text{NH}-\text{CO}-(\text{C}_1-\text{C}_6 \text{ alkyl}),$
 - (J) $-\text{NH}-\text{CO}-\text{O}-\text{R}_{\text{N}-8}$ where $\text{R}_{\text{N}-8}$ is as defined above,
 - (K) $-\text{NR}_{\text{N}-2}\text{R}_{\text{N}-3}$ where $\text{R}_{\text{N}-2}$ and $\text{R}_{\text{N}-3}$ are the same or different and are as defined above,
 - (L) $-\text{R}_{\text{N}-4}$ where $\text{R}_{\text{N}-4}$ is as defined above,
 - (M) $-\text{O}-\text{CO}-(\text{C}_1-\text{C}_6 \text{ alkyl}),$
 - (N) $-\text{O}-\text{CO}-\text{NR}_{\text{N}-8}\text{R}_{\text{N}-8}$ where the $\text{R}_{\text{N}-8}$ are the same or different and are as defined above, or

- (O) -O-(C₁-C₅ alkyl)-COOH,
- (V) -CO-(C₁-C₃ alkyl)-S-(C₁-C₃ alkyl) where alkyl is unsubstituted or substituted with one or two
- (A) -OH,
 - (B) -C₁-C₆ alkoxy,
 - (C) -C₁-C₆ thioalkoxy,
 - (D) -CO-O-R_{N-8} where R_{N-8} is -H, C₁-C₆ alkyl or - ϕ ,
 - (E) -CO-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (F) -CO-R_{N-4} where R_{N-4} is as defined above,
 - (G) -SO₂-(C₁-C₈ alkyl),
 - (H) -SO₂-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (I) -NH-CO-(C₁-C₆ alkyl),
 - (J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,
 - (K) -NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (L) -R_{N-4} where R_{N-4} is as defined above,
 - (M) -O-CO-(C₁-C₆ alkyl),
 - (N) -O-CO-NR_{N-8}R_{N-8} where the R_{N-8} are the same or different and are as defined above, or
 - (O) -O-(C₁-C₅ alkyl)-COOH,
- (VI) -CO-CH(-(CH₂)₀₋₂-O-R_{N-10})-(CH₂)₀₋₂-R_{N-aryl}/R_{N-heteroaryl}) where R_{N-aryl} and R_{N-heteroaryl} are as defined above, where R_{N-10} is:
- (A) -H,
 - (B) C₁-C₆ alkyl,
 - (C) C₃-C₇ cycloalkyl,
 - (D) C₂-C₆ alkenyl with one double bond,
 - (E) C₂-C₆ alkynyl with one triple bond,
 - (F) R_{1-aryl} where R_{1-aryl} is as defined above, or

(G) R_N -heteroaryl where R_N -heteroaryl is as defined above;

where B is -O-, -NH-, or -N(C₁-C₆ alkyl)-;

where R_C is:

~~(I) (C₁-C₁₀)alkyl-K₁₋₃ in which:~~

~~_____ (A) the alkyl chain is unsubstituted or substituted with one -OH,~~

~~(B) the alkyl chain is unsubstituted or substituted with one C₁-C₆ alkoxy unsubstituted or substituted with 1-5 -F,~~

~~_____ (C) the alkyl chain is unsubstituted or substituted with one -O- ϕ ,~~

~~_____ (D) the alkyl chain is unsubstituted or substituted with 1-5 -F,~~

~~(E) the alkyl chain is unsubstituted or substituted with a combination of up to three atoms of oxygen and sulfur each such atom replacing one carbon,~~

~~(F) each K is:~~

~~_____ (1) H,~~

~~_____ (2) C₁-C₃ alkyl,~~

~~_____ (3) C₁-C₃ alkoxy,~~

~~_____ (4) C₁-C₃ alkylthioxy,~~

~~_____ (5) C₁-C₆ alkylacylamino,~~

~~_____ (6) C₁-C₆ alkylacyloxy,~~

~~(7) amide~~

~~(8) C₁-C₆ alkylamino~~

~~(9) phenylamino,~~

~~(10) carbamyl~~

~~(11) carboxyl~~

~~(12) carboxy (C₂-C₅)alkoxy,~~
~~(13) carboxy (C₂-C₅)alkylthioxy,~~
~~(14) heterocycelylaacyl,~~
~~(15) heteroarylaacyl,~~
~~(16) amino unsubstituted or substituted~~
~~with C₁-C₆ alkyl,~~
~~(17) hydroxyl, or~~
~~(18) carboxyl methyl ester,~~

~~(II) -(CH₂)₀₋₃-J-[-(CH₂)₀₋₃-K]₁₋₃ where K is as defined~~
~~above and J is:~~

~~_____ (A) a 5 to 7 atom monocyclic aryl group,~~
~~_____ (B) a 8 to 12 atom multicyclic aryl group,~~
~~_____ (C) a 5 to 7 atom heterocyclic group,~~
~~_____ (D) a 8 to 12 atom multicyclic heterocyclic~~
~~group, or~~

~~_____ (E) a 5 to 10 atom monocyclic or multicyclic~~
~~cycloalkyl group,~~

~~_____ (III) -(CH₂)₀₋₃-(C₃-C₇) cycloalkyl where cycloalkyl can~~
~~be unsubstituted or substituted with one, two or~~
~~three~~

~~(A) C₁-C₃ alkyl unsubstituted or substituted with~~
~~1, 2, 3, or 4 -F,~~

~~-Cl, -Br, or -I,~~

~~(B) -CO-OH,~~

~~(C) -CO-O-(C₁-C₄ alkyl),~~

~~(D) -OH, or~~

~~(E) C₁-C₆ alkoxy,~~

~~(IV) -(CH₂)₂₋₆-OH,~~

~~_____ (V) -(CR_{C-x}R_{C-y})₀₋₄-R_{C-aryl} where R_{C-x} and R_{C-y} are H, C₁-C₄~~
~~alkyl and ϕ and R_{C-aryl} is the same as R_{N-aryl},~~

~~(VI) (CH₂)₀₋₄ R_C-heteroaryl where R_C-heteroaryl is:~~

~~(A) pyridinyl,~~

~~(B) pyrimidinyl,~~

~~(C) quinolinyl,~~

~~(D) indenyl,~~

~~(E) indanyl,~~

~~(F) benzothiophenyl,~~

~~(G) indolyl,~~

~~(H) indolinyl,~~

~~(I) pyridazinyl,~~

~~(J) pyrazinyl,~~

~~(K) isoindolyl,~~

~~(L) isoquinolyl,~~

~~(M) quinazolinyl,~~

~~(N) quinoxalinyl,~~

~~(O) phthalazinyl,~~

~~(P) isoxazolyl,~~

~~(Q) pyrazolyl,~~

~~(R) indolizinyll,~~

~~(S) indazolyl,~~

~~(T) benzothiazolyl,~~

~~(U) benzimidazolyl,~~

~~(V) benzofuranyl,~~

~~(W) furanyl,~~

~~(X) thienyl,~~

~~(Y) pyrrolyl,~~

~~(Z) oxadiazolyl,~~

~~(AA) thiadiazolyl,~~

~~(BB) triazolyl,~~

~~(CC) tetrazolyl,~~

~~(DD) 1, 4-benzodioxan~~

~~(EE) purinyl,~~
~~(FF) oxazolopyridinyl,~~
~~(GG) imidazopyridinyl,~~
~~(HH) isothiazolyl,~~
~~(II) naphthyridinyl,~~
~~(JJ) cinnolinyl,~~
~~(KK) carbazolyl,~~
~~(LL) β -carbolinyl,~~
~~(MM) isochromanyl,~~
~~(NN) chromanyl,~~
~~(OO) furazanyl,~~
~~(PP) tetrahydroisoquinoline,~~
~~(QQ) isoindolinyl,~~
~~(RR) isobenzotetrahydrofuranyl,~~
~~(SS) isobenzotetrahydrothienyl,~~
~~(TT) isobenzothiophenyl,~~
~~(UU) benzoxazolyl, or~~
~~(VV) pyridopyridinyl,~~
~~(VII) $-(CH_2)_{0-4}-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is the same as $R_{1-heterocycle}$~~
~~(VIII) $-C(R_{C-1})(R_{C-2})-CO-NH-R_{C-3}$ where R_{C-1} and R_{C-2} are the same or different and are:~~
~~(A) $-H,$~~
~~(B) $-C_1-C_6$ alkyl,~~
~~(C) $-(C_1-C_4 \text{ alkyl})-R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above for~~
 ~~R_{1-aryl}~~
~~(D) $-(C_1-C_4 \text{ alkyl})-R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,~~
~~(E) $-(C_1-C_4 \text{ alkyl})-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,~~

~~_____ (F) $R_{C_heteroaryl}$ where $R_{C_heteroaryl}$ is as defined above,~~

~~_____ (G) $R_{C_heterocycle}$ where $R_{C_heterocycle}$ is as defined above,~~

~~_____ (H) $(CH_2)_{1-4}OH$,~~

~~_____ (I) $(CH_2)_{1-4}R_{C_4}(CH_2)_{1-4}R_{C'_aryl}$ where R_{C_4} is O, S, NH or~~

~~NHR_{C_5} where R_{C_5} is C_1-C_6 alkyl, and where $R_{C'_aryl}$ is as defined above,~~

~~_____ (J) $(CH_2)_{1-4}R_{C_4}(CH_2)_{1-4}R_{C_heteroaryl}$ where R_{C_4} and $R_{C_heteroaryl}$ are as defined above, or~~

~~_____ (K) $R_{C'_aryl}$ where $R_{C'_aryl}$ is as defined above, and where R_{C_3} is:~~

~~_____ (A) H,~~

~~_____ (B) C_1-C_6 alkyl,~~

~~_____ (C) $R_{C'_aryl}$ where $R_{C'_aryl}$ is as defined above,~~

~~_____ (D) $R_{C_heteroaryl}$ where $R_{C_heteroaryl}$ is as defined above,~~

~~_____ (E) $R_{C_heterocycle}$ where $R_{C_heterocycle}$ is as defined above,~~

~~_____ (F) $(C_1-C_4$ alkyl) $R_{C'_aryl}$ where $R_{C'_aryl}$ is as defined above,~~

~~_____ (G) $(C_1-C_4$ alkyl) $R_{C_heteroaryl}$ where $R_{C_heteroaryl}$ is as defined above, or~~

~~_____ (H) $(C_1-C_4$ alkyl) $R_{C_heterocycle}$ where $R_{C_heterocycle}$ is as defined above,~~

~~_____ (IX) $CH(\phi)_2$,~~

~~_____ (X) cyclopentyl or cyclohexyl ring fused to a phenyl or heteroaryl ring where heteroaryl is as defined above and phenyl and heteroaryl are unsubstituted or substituted with one, two or three:~~

~~_____ (A) C₁-C₃-alkyl,~~
~~_____ (B) CF₃,~~
~~_____ (C) F, Cl, Br and I,~~
~~_____ (D) C₁-C₃-alkoxy,~~
~~_____ (E) OCF₃,~~
~~_____ (F) NH₂,~~
~~_____ (G) OH, or~~
~~_____ (H) C≡N,~~
~~_____ (XI) CH₂-C≡CH,~~
~~_____ (XII) (CH₂)₀₋₁-CHR_{C-5}-(CH₂)₀₋₁- ϕ where R_{C-5} is:~~
~~_____ (A) OH, or~~
~~_____ (B) CH₂-OH,~~
~~_____ (XIII) CH(ϕ)-CO-O(C₁-C₃-alkyl),~~
~~_____ (XIV) CH(CH₂-OH)-CH(OH)- ϕ -NO₂,~~
~~_____ (XV) (CH₂)₂-O-(CH₂)₂-OH,~~
~~_____ (XVI) CH₂-NH-CH₂-CH(O-CH₂-CH₃)₂,~~
~~_____ (XVII) (C₂-C₈) alkynyl, or~~
~~_____ (XVIII) H, or a pharmaceutically acceptable salt~~
 thereof.

50. (Original) The method of claim 49, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 0.1nM to about 200 μ M.

51. (Original) The method of claim 50, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 10nM to about 100 μ M.

52. (Original) The method of claim 51, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 100nM to about 50μM.

53. (Original) The method of claim 52, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 1μM to about 10μM.

54. (Currently Amended) The method of claim 49, wherein said ~~therapeutic~~ therapeutic amount is in the range of from about 0.1 to about 1000 mg/day.

55. (Currently Amended) The method of claim 49, wherein said ~~therapeutic~~ therapeutic amount is in the range of from about 15 to about 1500 mg/day.

56. (Currently Amended) The method of claim 55, wherein said ~~therapeutic~~ therapeutic amount is in the range of from about 1 to about 100 mg/day.

57. (Currently Amended) The method of claim 56, wherein said ~~therapeutic~~ therapeutic amount is in the range of from about 5 to about 50 mg/day.

58. (Original) The method of claim 49, wherein said disease is Alzheimer's disease.

59. (Currently Amended) The method of claim 49, wherein said disease is Mild Cognitive Impairment, Down's Syndrome, or Hereditary Cerebral ~~Hemorrhage~~ Hemorrhage with Amyloidosis of the Dutch Type.

60-98. (Canceled)

99. (New) A method according to claim 49, wherein the compound is

N-[(1*S*, 2*S*, 4*R*)-1-(3,5-Difluorobenzyl)-4-(*syn*, *syn*)-(3,5-dimethoxycyclohexylcarbamoyl)-2-hydroxyhexyl]-*N,N*-dipropylisophthalamide;

N-[4-(*R*)-(Cyclohexylmethyl-carbamoyl)-1-(*S*)-(3,5-difluorobenzyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide;

4-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid methyl ester;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-2-(*R*)-methyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-2-(*R*)-propyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxyl-2-(*R*)-isobutyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([2-(*R*)-Benzyl-6-(3,5-difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-5-methyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid;

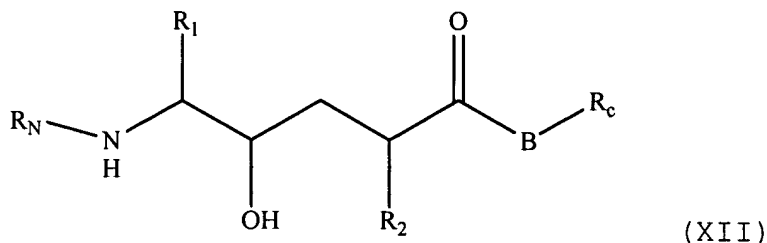
4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-5-methyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid methyl ester;

4-(*anti*)-{[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-methyl}cyclohexanecarboxylic acid;

N-[(1*S*, 2*S*, 4*R*)-1-(3,5-Difluorobenzyl)-4-(*syn, syn*)-(3,5-dimethoxycyclohexylcarbamoyl)-2-hydroxyhexyl]-*N, N*-dipropylisophthalamide; or

N-[4-(*R*)-(Adamantan-2-ylcarbamoyl)-1-(*S*)-(3,5-difluorobenzyl)-2-(*S*)-hydroxy-pentyl]-5-methyl-*N, N*-dipropylisophthalamide.

100. (New) A method for treating Mild Cognitive Impairment, Down's Syndrome, or Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch Type comprising administering an effective amount of the formula



where R_1 is:

- (I) C_1 - C_6 alkyl, unsubstituted or substituted with one, two or three C_1 - C_3 alkyl, -F, -Cl, -Br, -I, -OH, - NH_2 , - $C\equiv N$, - CF_3 , or - N_3 ,
- (II) $-(CH_2)_{1-2}-S-CH_3$,

(III) $-\text{CH}_2-\text{CH}_2-\text{S}-\text{CH}_3$,

(IV) $-\text{CH}_2-(\text{C}_2-\text{C}_6 \text{ alkenyl})$ unsubstituted or substituted by one $-\text{F}$,

(V) $-(\text{CH}_2)_{0-3}-(\text{R}_1\text{-aryl})$ where $\text{R}_1\text{-aryl}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, tetralinyl unsubstituted or substituted on the aryl ring with one or two of the following substituents which can be the same or different:

- (A) C_1-C_3 alkyl,
- (B) $-\text{CF}_3$,
- (C) $-\text{F}$, Cl , $-\text{Br}$ and $-\text{I}$,
- (D) C_1-C_3 alkoxy,
- (E) $-\text{O}-\text{CF}_3$,
- (F) $-\text{NH}_2$,
- (G) $-\text{OH}$, or
- (H) $-\text{C}\equiv\text{N}$,

(VI) $-(\text{CH}_2)_{n1}-(\text{R}_1\text{-heteroaryl})$ where n_1 is 0, 1, 2, or 3 and $\text{R}_1\text{-heteroaryl}$ is:

- (A) pyridinyl,
- (B) pyrimidinyl,
- (C) quinolinyl,
- (D) indenyl,
- (E) indanyl,
- (F) benzothiophenyl,
- (G) indolyl,
- (H) indolinyl,
- (I) pyridazinyl,
- (J) pyrazinyl,
- (K) isoindolyl,
- (L) isoquinolyl,

(M) quinazolinyl,
(N) quinoxalinyl,
(O) phthalazinyl,
(P) imidazolyl,
(Q) isoxazolyl,
(R) pyrazolyl,
(S) oxazolyl,
(T) thiazolyl,
(U) indolizinyl,
(V) indazolyl,
(W) benzothiazolyl,
(X) benzimidazolyl,
(Y) benzofuranyl,
(Z) furanyl,
(AA) thienyl,
(BB) pyrrolyl,
(CC) oxadiazolyl,
(DD) thiadiazolyl,
(EE) triazolyl,
(FF) tetrazolyl,
(GG) 1, 4-benzodioxan
(HH) purinyl,
(II) oxazolopyridinyl,
(JJ) imidazopyridinyl,
(KK) isothiazolyl,
(LL) naphthyridinyl,
(MM) cinnolinyl,
(NN) carbazolyl,
(OO) β -carbolinyl,
(PP) isochromanyl,
(QQ) chromanyl,

(RR) furazanyl,
(SS) tetrahydroisoquinoline,
(TT) isoindolinyl,
(UU) isobenzotetrahydrofuranyl,
(VV) isobenzotetrahydrothienyl,
(WW) isobenzothiophenyl,
(XX) benzoxazolyl, or
(YY) pyridopyridinyl,

where the R_1 -heteroaryl group is bonded to $-(CH_2)_{0-3}-$ by any ring atom of the parent R_N -heteroaryl group substituted by hydrogen such that the new bond to the R_1 -heteroaryl group replaces the hydrogen atom and its bond, where heteroaryl is unsubstituted or substituted with one or two:

- (1) C_1-C_3 alkyl,
- (2) $-CF_3$,
- (3) $-F$, Cl , $-Br$, or $-I$,
- (4) C_1-C_3 alkoxy,
- (5) $-O-CF_3$,
- (6) $-NH_2$,
- (7) $-OH$, or
- (8) $-C\equiv N$,

with the proviso that when n_1 is zero R_1 -heteroaryl is not bonded to the carbon chain by nitrogen, or

(VII) $-(CH_2)_{n_1}-(R_1\text{-heterocycle})$ where n_1 is as defined above and

R_1 -heterocycle is:

- (A) morpholinyl,
- (B) thiomorpholinyl,
- (C) thiomorpholinyl S-oxide,
- (D) thiomorpholinyl S,S-dioxide,
- (E) piperazinyl,

- (F) homopiperazinyl,
- (G) pyrrolidinyl,
- (H) pyrrolinyl,
- (I) tetrahydropyranyl,
- (J) piperidinyl,
- (K) tetrahydrofuranyl, or
- (L) tetrahydrothiophenyl,

where the R_1 -heterocycle group is bonded by any atom of the parent R_1 -heterocycle group substituted by hydrogen such that the new bond to the R_1 -heteroaryl group replaces the hydrogen atom and its bond, where heterocycle is unsubstituted or substituted with one or two:

- (1) =O,
- (2) C_1 - C_3 alkyl,
- (3) $-CF_3$,
- (4) -F, Cl, -Br and -I,
- (5) C_1 - C_3 alkoxy,
- (6) $-O-CF_3$,
- (7) $-NH_2$,
- (8) -OH, or
- (9) $-C\equiv N$,

with the proviso that when n_1 is zero R_1 -heterocycle is not bonded to the carbon chain by nitrogen;

where R_2 is:

- (I) -H,
- (II) C_1 - C_6 alkyl, or
- (III) $-(CH_2)_{0-4}-R_{2-1}$ where R_{2-1} is (C_3-C_6) cycloalkyl, R_1 -aryl or R_1 -heteroaryl where R_1 -aryl and R_1 -heteroaryl are as defined above,

where R_N is:

- (I) $R_{N-1}-X_N$ - where X_N is:

- (A) -CO- ,
- (B) $\text{-SO}_2\text{-}$,
- (C) -(CR'R'')_{1-6} where R' and R'' are the same or different and are -H or $\text{C}_1\text{-C}_4$ alkyl,
- (D) $\text{-CO-(CR'R'')}_{1-6}\text{-X}_{\text{N-1}}$ where $\text{X}_{\text{N-1}}$ is -O- , -S- and -NR'R''- and where R' and R'' are as defined above,
- (E) a single bond;

where $\text{R}_{\text{N-1}}$ is:

- (A) $\text{R}_{\text{N-aryl}}$ where $\text{R}_{\text{N-aryl}}$ is phenyl, 1-naphthyl and 2-naphthyl unsubstituted or substituted with one, two, three or four of the following substituents which can be the same or different and are:
 - (1) $\text{C}_1\text{-C}_6$ alkyl,
 - (2) -F , -Cl , -Br , or -I ,
 - (3) -OH ,
 - (4) -NO_2 ,
 - (5) -CO-OH ,
 - (6) $\text{-C}\equiv\text{N}$,
 - (7) $\text{-CO-NR}_{\text{N-2}}\text{R}_{\text{N-3}}$ where $\text{R}_{\text{N-2}}$ and $\text{R}_{\text{N-3}}$ are the same or different and are:
 - (a) -H ,
 - (b) $\text{-C}_1\text{-C}_6$ alkyl unsubstituted or substituted with one
 - (i) -OH , or
 - (ii) -NH_2 ,
 - (c) $\text{-C}_1\text{-C}_6$ alkyl unsubstituted or substituted with one to three -F , -Cl , -Br , or -I ,
 - (d) $\text{-C}_3\text{-C}_7$ cycloalkyl,

- (e) $-(C_1-C_2 \text{ alkyl})-(C_3-C_7 \text{ cycloalkyl})$,
 (f) $-(C_1-C_6 \text{ alkyl})-O-(C_1-C_3 \text{ alkyl})$,
 (g) $-C_1-C_6 \text{ alkenyl}$ with one or two
 double bonds,
 (h) $-C_1-C_6 \text{ alkynyl}$ with one or two
 triple bonds,
 (i) $-C_1-C_6 \text{ alkyl chain}$ with one double
 bond and one triple bond,
 (j) $-R_1\text{-aryl}$ where $R_1\text{-aryl}$ is as defined
 above, or
 (k) $-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as
 defined above,
 (8) $-\text{CO}-(C_3-C_{12} \text{ alkyl})$,
 (9) $-\text{CO}-(C_3-C_6 \text{ cycloalkyl})$,
 (10) $-\text{CO}-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as
 defined above,
 (11) $-\text{CO}-R_1\text{-heterocycle}$ where $R_1\text{-heterocycle}$ is as
 defined above,
 (12) $-\text{CO}-R_{N-4}$ where R_{N-4} is morpholinyl,
 thiomorpholinyl, piperazinyl, piperidinyl
 or pyrrolidinyl where each group is
 unsubstituted or substituted with one or
 two $C_1-C_3 \text{ alkyl}$,
 (13) $-\text{CO}-O-R_{N-5}$ where R_{N-5} is:
 (a) $C_1-C_6 \text{ alkyl}$, or
 (b) $-(CH_2)_{0-2}-(R_1\text{-aryl})$ where $R_1\text{-aryl}$ is as
 defined above,
 (14) $-\text{SO}_2-\text{NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as
 defined above,
 (15) $-\text{SO}-(C_1-C_8 \text{ alkyl})$,
 (16) $-\text{SO}_2-(C_3-C_{12} \text{ alkyl})$,

above,

(17) -NH-CO-O-R_{N-5} where R_{N-5} is as defined

(18) $\text{-NH-CO-N(C}_1\text{-C}_3\text{ alkyl)}_2$,

(19) $\text{-N-CS-N(C}_1\text{-C}_3\text{ alkyl)}_2$,

(20) $\text{-N(C}_1\text{-C}_3\text{ alkyl)-CO-R}_{N-5}$ where R_{N-5} is as defined above,

(21) $\text{-NR}_{N-2}\text{R}_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) $\text{-O-CO-(C}_1\text{-C}_6\text{ alkyl)}$,

(24) $\text{-O-CO-N(C}_1\text{-C}_3\text{ alkyl)}_2$,

(25) $\text{-O-CS-N(C}_1\text{-C}_3\text{ alkyl)}_2$,

(26) $\text{-O-(C}_1\text{-C}_6\text{ alkyl)}$,

(27) $\text{-O-(C}_2\text{-C}_5\text{ alkyl)-COOH}$,

(28) $\text{-S-(C}_1\text{-C}_6\text{ alkyl)}$,

(29) $\text{C}_1\text{-C}_6$ alkyl unsubstituted or substituted with 1, 2, 3, 4, or 5 -F,

(30) $\text{-O-(C}_1\text{-C}_6\text{ alkyl unsubstituted or substituted with 1, 2, 3, 4, or 5 -F, or}$

(31) $\text{-O-}\phi$,

(B) $\text{-R}_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,
(K) isoindolyl,
(L) isoquinolyl,
(M) quinazolinyl,
(N) quinoxalinyl,
(O) phthalazinyl,
(P) imidazolyl,
(Q) isoxazolyl,
(R) pyrazolyl,
(S) oxazolyl,
(T) thiazolyl,
(U) indolizinyll,
(V) indazolyl,
(W) benzothiazolyl,
(X) benzimidazolyl,
(Y) benzofuranyl,
(Z) furanyl,
(AA) thienyl,
(BB) pyrrolyl,
(CC) oxadiazolyl,
(DD) thiadiazolyl,
(EE) triazolyl,
(FF) tetrazolyl,
(GG) 1, 4-benzodioxan
(HH) purinyl,
(II) oxazolopyridinyl,
(JJ) imidazopyridinyl,
(KK) isothiazolyl,
(LL) naphthyridinyl,
(MM) cinnolinyl,
(NN) carbazolyl,

(OO) β -carbolinyl,
(PP) isochromanyl,
(QQ) chromanyl,
(RR) furazanyl,
(SS) tetrahydroisoquinoline,
(TT) isoindolinyl,
(UU) isobenzotetrahydrofuranyl,
(VV) isobenzotetrahydrothienyl,
(WW) isobenzothiophenyl,
(XX) benzoxazolyl, or
(YY) pyridopyridinyl,

where the R_N -heteroaryl group is bonded by any atom of the parent R_N -heteroaryl group substituted by hydrogen such that the new bond to the R_N -heteroaryl group replaces the hydrogen atom and its bond, where heteroaryl is unsubstituted or substituted with one or two:

- (1) C_1 - C_6 alkyl,
- (2) -F, -Cl, -Br, or -I,
- (3) -OH,
- (4) -NO₂,
- (5) -CO-OH,
- (6) -C \equiv N,
- (7) -CO-NR_{N-2}R_{N-3} where R_{N-2} and R_{N-3} are the same or different and are:
 - (a) -H,
 - (b) -C₁-C₆ alkyl unsubstituted or substituted with one
 - (i) -OH, or
 - (ii) -NH₂,

- (c) $-C_1-C_6$ alkyl unsubstituted or substituted with 1, 2, or 3 -F, -Cl, -Br, or -I,
- (d) $-C_3-C_7$ cycloalkyl,
- (e) $-(C_1-C_2 \text{ alkyl})-(C_3-C_7 \text{ cycloalkyl})$,
- (f) $-(C_1-C_6 \text{ alkyl})-O-(C_1-C_3 \text{ alkyl})$,
- (g) $-C_1-C_6$ alkenyl with one or two double bonds,
- (h) $-C_1-C_6$ alkynyl with one or two triple bonds,
- (i) $-C_1-C_6$ alkyl chain with one double bond and one triple bond,
- (j) $-R_1\text{-aryl}$ where $R_1\text{-aryl}$ is as defined above, or
- (k) $-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,
- (8) $-\text{CO}-(C_3-C_{12} \text{ alkyl})$,
- (9) $-\text{CO}-(C_3-C_6 \text{ cycloalkyl})$,
- (10) $-\text{CO}-R_1\text{-heteroaryl}$ where $R_1\text{-heteroaryl}$ is as defined above,
- (11) $-\text{CO}-R_1\text{-heterocycle}$ where $R_1\text{-heterocycle}$ is as defined above,
- (12) $-\text{CO}-R_{N-4}$ where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with one or two C_1-C_3 alkyl,
- (13) $-\text{CO}-O-R_{N-5}$ where R_{N-5} is:
- (a) C_1-C_6 alkyl, or

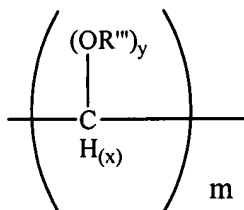
- (b) $-(\text{CH}_2)_{0-2}-(\text{R}_{1\text{-aryl}})$ where $\text{R}_{1\text{-aryl}}$ is as defined above,
- (14) $-\text{SO}_2-\text{NR}_{\text{N-2}}\text{R}_{\text{N-3}}$ where $\text{R}_{\text{N-2}}$ and $\text{R}_{\text{N-3}}$ are as defined above,
- (15) $-\text{SO}-(\text{C}_1-\text{C}_8 \text{ alkyl})$,
- (16) $-\text{SO}_2-(\text{C}_3-\text{C}_{12} \text{ alkyl})$,
- (17) $-\text{NH}-\text{CO}-\text{O}-\text{R}_{\text{N-5}}$ where $\text{R}_{\text{N-5}}$ is as defined above,
- (18) $-\text{NH}-\text{CO}-\text{N}(\text{C}_1-\text{C}_3 \text{ alkyl})_2$,
- (19) $-\text{N}-\text{CS}-\text{N}(\text{C}_1-\text{C}_3 \text{ alkyl})_2$,
- (20) $-\text{N}(\text{C}_1-\text{C}_3 \text{ alkyl})-\text{CO}-\text{R}_{\text{N-5}}$ where $\text{R}_{\text{N-5}}$ is as defined above,
- (21) $-\text{NR}_{\text{N-2}}\text{R}_{\text{N-3}}$ where $\text{R}_{\text{N-2}}$ and $\text{R}_{\text{N-3}}$ can be the same or different and are as defined above,
- (22) $-\text{R}_{\text{N-4}}$ where $\text{R}_{\text{N-4}}$ is as defined above,
- (23) $-\text{O}-\text{CO}-(\text{C}_1-\text{C}_6 \text{ alkyl})$,
- (24) $-\text{O}-\text{CO}-\text{N}(\text{C}_1-\text{C}_3 \text{ alkyl})_2$,
- (25) $-\text{O}-\text{CS}-\text{N}(\text{C}_1-\text{C}_3 \text{ alkyl})_2$,
- (26) $-\text{O}-(\text{C}_1-\text{C}_6 \text{ alkyl})$,
- (27) $-\text{O}-(\text{C}_2-\text{C}_5 \text{ alkyl})-\text{COOH}$, or
- (28) $-\text{S}-(\text{C}_1-\text{C}_6 \text{ alkyl})$,
- (C) $-\text{R}_{\text{N-aryl}}-\text{R}_{\text{N-aryl}}$ where $-\text{R}_{\text{N-aryl}}$ is as defined above,
- (D) $-\text{R}_{\text{N-aryl}}-\text{R}_{\text{N-heteroaryl}}$ where $-\text{R}_{\text{N-aryl}}$ and $-\text{R}_{\text{N-heteroaryl}}$ are as defined above,
- (E) $-\text{R}_{\text{N-heteroaryl}}-\text{R}_{\text{N-aryl}}$ where $-\text{R}_{\text{N-aryl}}$ and $-\text{R}_{\text{N-heteroaryl}}$ are as defined above,
- (F) $-\text{R}_{\text{N-heteroaryl}}-\text{R}_{\text{N-heteroaryl}}$ where $\text{R}_{\text{N-heteroaryl}}$ is as defined above,

- (G) $-R_N\text{-aryl-O-}R_N\text{-aryl}$ where $-R_N\text{-aryl}$ is as defined above,
- (H) $-R_N\text{-aryl-S-}R_N\text{-aryl}$ where $-R_N\text{-aryl}$ is as defined above,
- (I) $-R_N\text{-heteroaryl-O-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,
- (J) $-R_N\text{-heteroaryl-S-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,
- (K) $-R_N\text{-aryl-CO-}R_N\text{-aryl}$ where $-R_N\text{-aryl}$ is as defined above,
- (L) $-R_N\text{-aryl-CO-}R_N\text{-heteroaryl}$ where $-R_N\text{-aryl}$ and $R_N\text{-heteroaryl}$ are as defined above,
- (M) $-R_N\text{-aryl-SO}_2\text{-}R_N\text{-aryl}$ where $-R_N\text{-aryl}$ is as defined above,
- (N) $-R_N\text{-heteroaryl-CO-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,
- (O) $-R_N\text{-heteroaryl-SO}_2\text{-}R_N\text{-heteroaryl}$ where $R_N\text{-heteroaryl}$ is as defined above,
- (P) $-R_N\text{-aryl-O-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-aryl}$ is as defined above,
- (Q) $-R_N\text{-aryl-S-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-aryl}$ is as defined above,
- (R) $-R_N\text{-heteroaryl-O-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-heteroaryl}$ is as defined above, or
- (S) $-R_N\text{-heteroaryl-S-(C}_1\text{-C}_8\text{ alkyl)-}\phi$ where $R_N\text{-heteroaryl}$ is as defined above,

(II) $A\text{-X}_N\text{-}$ where X_N is -CO- ,

wherein A is

- (A) $\text{-T-E-(Q)}_m\text{'}$,
 (1) where -T is



where

(a) $x = 1$ when $y = 1$ and $x = 2$ when $y = 0$,

(b) m is 0, 1, 2 or 3,

(c) the values of x and y vary independently on each carbon when m is 2 and 3, and

(d) R''' varies independently on each carbon and is H, $(\text{C}_1\text{-C}_2)$ alkyl, phenyl, or phenyl $(\text{C}_1\text{-C}_3)$ alkyl;

(2) -E is

(a) $\text{C}_1\text{-C}_5$ alkyl, but only if m' does not equal 0,

(b) methylthioxy $(\text{C}_2\text{-C}_4)$ alkyl,

(c) an aryl group having 5 to 7 atoms when monocyclic or having 8 to 12 atoms when fused,

(d) a heterocyclic group having 5 to 7 atoms when monocyclic or having 8 to 12 atoms when fused,

(e) a mono or fused ring cycloalkyl group having 5 to 10 carbon atoms,

(f) biphenyl,

(g) diphenyl ether,

(h) diphenylketone,

(i) phenyl $(\text{C}_1\text{-C}_8)$ alkyloxyphenyl, or

- (j) C₁-C₆ alkoxy;
- (3) -Q is
- (a) C₁-C₃ alkyl,
 - (b) C₁-C₃ alkoxy,
 - (c) C₁-C₃ alkylthioxy,
 - (d) C₁-C₆ alkylacylamino,
 - (e) C₁-C₆ alkylacyloxy,
 - (f) amido (including primary, C₁-C₆ alkyl and phenyl secondary and tertiary amino moieties),
 - (g) C₁-C₆ alkylamino
 - (h) phenylamino,
 - (i) carbamyl (including C₁-C₆ alkyl and phenyl amides and esters),
 - (j) carboxyl (including C₁-C₆ alkyl and phenyl esters),
 - (k) carboxy(C₂-C₅)alkoxy,
 - (l) carboxy(C₂-C₅)alkylthioxy,
 - (m) heterocyclacyl,
 - (n) heteroarylacyl, or
 - (o) hydroxyl;
- (4) m' is 0, 1, 2 or 3;

- (B) -E(Q)_{m'}, wherein E and -Q are as defined as above and m' is 0, 1, 2, or 3;
- (C) -T-E wherein -E and -Q are as defined as above; or
- (D) -E wherein -E is as defined as above;

(III) -CO-(C₁-C₆ alkyl) where alkyl is unsubstituted or substituted with one or two:

- (A) -OH,

- (B) $-C_1-C_6$ alkoxy,
 - (C) $-C_1-C_6$ thioalkoxy,
 - (D) $-CO-O-R_{N-8}$ where R_{N-8} is $-H$, C_1-C_6 alkyl or $-\phi$,
 - (E) $-CO-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (F) $-CO-R_{N-4}$ where R_{N-4} is as defined above,
 - (G) $-SO_2-(C_1-C_8 \text{ alkyl})$,
 - (H) $-SO_2-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (I) $-NH-CO-(C_1-C_6 \text{ alkyl})$,
 - (J) $-NH-CO-O-R_{N-8}$ where R_{N-8} is as defined above,
 - (K) $-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (L) $-R_{N-4}$ where R_{N-4} is as defined above,
 - (M) $-O-CO-(C_1-C_6 \text{ alkyl})$,
 - (N) $-O-CO-NR_{N-8}R_{N-8}$ where the R_{N-8} is the same or different and are as defined above, or
 - (O) $-O-(C_1-C_5 \text{ alkyl})-COOH$,
- (IV) $-CO-(C_1-C_3 \text{ alkyl})-O-(C_1-C_3 \text{ alkyl})$ where alkyl is unsubstituted or substituted with one or two
- (A) $-OH$,
 - (B) $-C_1-C_6$ alkoxy,
 - (C) $-C_1-C_6$ thioalkoxy,
 - (D) $-CO-O-R_{N-8}$ where R_{N-8} is $-H$, C_1-C_6 alkyl or $-\phi$,
 - (E) $-CO-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (F) $-CO-R_{N-4}$ where R_{N-4} is as defined above,
 - (G) $-SO_2-(C_1-C_8 \text{ alkyl})$,
 - (H) $-SO_2-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (I) $-NH-CO-(C_1-C_6 \text{ alkyl})$,

- (J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,
 - (K) $\text{-NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (L) -R_{N-4} where R_{N-4} is as defined above,
 - (M) $\text{-O-CO-(C}_1\text{-C}_6\text{ alkyl)}$,
 - (N) $\text{-O-CO-NR}_{N-8}R_{N-8}$ where the R_{N-8} are the same or different and are as defined above, or
 - (O) $\text{-O-(C}_1\text{-C}_5\text{ alkyl)-COOH}$,
- (V) $\text{-CO-(C}_1\text{-C}_3\text{ alkyl)-S-(C}_1\text{-C}_3\text{ alkyl)}$ where alkyl is unsubstituted or substituted with one or two
- (A) -OH ,
 - (B) $\text{-C}_1\text{-C}_6\text{ alkoxy}$,
 - (C) $\text{-C}_1\text{-C}_6\text{ thioalkoxy}$,
 - (D) -CO-O-R_{N-8} where R_{N-8} is -H , $\text{C}_1\text{-C}_6\text{ alkyl}$ or $\text{-}\phi$,
 - (E) $\text{-CO-NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (F) -CO-R_{N-4} where R_{N-4} is as defined above,
 - (G) $\text{-SO}_2\text{-(C}_1\text{-C}_8\text{ alkyl)}$,
 - (H) $\text{-SO}_2\text{-NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (I) $\text{-NH-CO-(C}_1\text{-C}_6\text{ alkyl)}$,
 - (J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,
 - (K) $\text{-NR}_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,
 - (L) -R_{N-4} where R_{N-4} is as defined above,
 - (M) $\text{-O-CO-(C}_1\text{-C}_6\text{ alkyl)}$,
 - (N) $\text{-O-CO-NR}_{N-8}R_{N-8}$ where the R_{N-8} are the same or different and are as defined above, or
 - (O) $\text{-O-(C}_1\text{-C}_5\text{ alkyl)-COOH}$,

(VI) $-\text{CO}-\text{CH}(-(\text{CH}_2)_{0-2}-\text{O}-\text{R}_{\text{N}-10})-(\text{CH}_2)_{0-2}-\text{R}_{\text{N-aryl}}/\text{R}_{\text{N-heteroaryl}}$

where $\text{R}_{\text{N-aryl}}$ and $\text{R}_{\text{N-heteroaryl}}$ are as defined above,

where $\text{R}_{\text{N}-10}$ is:

- (A) $-\text{H}$,
- (B) C_1-C_6 alkyl,
- (C) C_3-C_7 cycloalkyl,
- (D) C_2-C_6 alkenyl with one double bond,
- (E) C_2-C_6 alkynyl with one triple bond,
- (F) $\text{R}_{1\text{-aryl}}$ where $\text{R}_{1\text{-aryl}}$ is as defined above, or
- (G) $\text{R}_{\text{N-heteroaryl}}$ where $\text{R}_{\text{N-heteroaryl}}$ is as defined

above;

where B is $-\text{O}-$, $-\text{NH}-$, or $-\text{N}(\text{C}_1-\text{C}_6 \text{ alkyl})-$;

where R_C is:

(I) $-(\text{C}_1-\text{C}_{10})\text{alkyl}-\text{K}_{1-3}$ in which:

- (A) the alkyl chain is unsubstituted or substituted with one $-\text{OH}$,
- (B) the alkyl chain is unsubstituted or substituted with one C_1-C_6 alkoxy unsubstituted or substituted with 1-5 $-\text{F}$,
- (C) the alkyl chain is unsubstituted or substituted with one $-\text{O}-\phi$,
- (D) the alkyl chain is unsubstituted or substituted with 1-5 $-\text{F}$,
- (E) the alkyl chain is unsubstituted or substituted with a combination of up to three atoms of oxygen and sulfur each such atom replacing one carbon,
- (F) each K is:
 - (1) H ,
 - (2) C_1-C_3 alkyl,
 - (3) C_1-C_3 alkoxy,

- (4) C₁-C₃ alkylthioxy,
- (5) C₁-C₆ alkylacylamino,
- (6) C₁-C₆ alkylacyloxy,
- (7) amido
- (8) C₁-C₆ alkylamino
- (9) phenylamino,
- (10) carbamyl
- (11) carboxyl
- (12) carboxy(C₂-C₅)alkoxy,
- (13) carboxy(C₂-C₅)alkylthioxy,
- (14) heterocyclylacyl,
- (15) heteroarylacyl,
- (16) amino unsubstituted or substituted with C₁-C₆ alkyl,
- (17) hydroxyl, or
- (18) carboxyl methyl ester;

(II) -(CH₂)₀₋₃-J-[-(CH₂)₀₋₃-K]₁₋₃ where K is as defined above and J is:

- (A) a 5 to 7 atom monocyclic aryl group,
- (B) a 8 to 12 atom multicyclic aryl group,
- (C) a 5 to 7 atom heterocyclic group,
- (D) a 8 to 12 atom multicyclic heterocyclic

group, or

- (E) a 5 to 10 atom monocyclic or multicyclic cycloalkyl group;

(III) -(CH₂)₀₋₃-(C₃-C₇) cycloalkyl where cycloalkyl can be unsubstituted or substituted with one, two or three

- (A) C₁-C₃ alkyl unsubstituted or substituted with 1, 2, 3, or 4 -F,

- Cl, -Br, or -I,
- (B) -CO-OH,
- (C) -CO-O-(C₁-C₄ alkyl),
- (D) -OH, or
- (E) C₁-C₆ alkoxy,
- (IV) -(CH₂)₂₋₆-OH,
- (V) -(CR_{C-x}R_{C-y})₀₋₄-R_{C-aryl} where R_{C-x} and R_{C-y} are -H, C₁-C₄ alkyl and ϕ - and R_{C-aryl} is the same as R_{N-aryl},
- (VI) -(CH₂)₀₋₄-R_{C-heteroaryl} where R_{C-heteroaryl} is:
- (A) pyridinyl,
 - (B) pyrimidinyl,
 - (C) quinolinyl,
 - (D) indenyl,
 - (E) indanyl,
 - (F) benzothiophenyl,
 - (G) indolyl,
 - (H) indolinyl,
 - (I) pyridazinyl,
 - (J) pyrazinyl,
 - (K) isoindolyl,
 - (L) isoquinolyl,
 - (M) quinazolinyl,
 - (N) quinoxalinyl,
 - (O) phthalazinyl,
 - (P) isoxazolyl,
 - (Q) pyrazolyl,
 - (R) indolizinyl,
 - (S) indazolyl,
 - (T) benzothiazolyl,
 - (U) benzimidazolyl,
 - (V) benzofuranyl,

(W) furanyl,
 (X) thienyl,
 (Y) pyrrolyl,
 (Z) oxadiazolyl,
 (AA) thiadiazolyl,
 (BB) triazolyl,
 (CC) tetrazolyl,
 (DD) 1, 4-benzodioxan
 (EE) purinyl,
 (FF) oxazolopyridinyl,
 (GG) imidazopyridinyl,
 (HH) isothiazolyl,
 (II) naphthyridinyl,
 (JJ) cinnolinyl,
 (KK) carbazolyl,
 (LL) β -carbolinyl,
 (MM) isochromanlyl,
 (NN) chromanlyl,
 (OO) furazanlyl,
 (PP) tetrahydroisoquinoline,
 (QQ) isoindolinyl,
 (RR) isobenzotetrahydrofuranyl,
 (SS) isobenzotetrahydrothienyl,
 (TT) isobenzothiophenyl,
 (UU) benzoxazolyl, or
 (VV) pyridopyridinyl,

(VII) $-(CH_2)_{0-4}-R_C$ -heterocycle where R_C -heterocycle is the same as R_1 -heterocycle,

(VIII) $-C(R_{C-1})(R_{C-2})-CO-NH-R_{C-3}$ where R_{C-1} and R_{C-2} are the same or different and are:

(A) $-H$,

(B) $-C_1-C_6$ alkyl,

(C) $-(C_1-C_4 \text{ alkyl})-R_{C'}\text{-aryl}$ where $R_{C'}\text{-aryl}$ is as defined above for

$R_1\text{-aryl}$,

(D) $-(C_1-C_4 \text{ alkyl})-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(E) $-(C_1-C_4 \text{ alkyl})-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(F) $-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(G) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(H) $-(CH_2)_{1-4}-OH$,

(I) $-(CH_2)_{1-4}-R_{C-4}-(CH_2)_{1-4}-R_{C'}\text{-aryl}$ where R_{C-4} is $-O-$, $-S-$, $-NH-$ or

$-NHR_{C-5}-$ where R_{C-5} is C_1-C_6 alkyl, and where $R_{C'}\text{-aryl}$ is as defined above,

(J) $-(CH_2)_{1-4}-R_{C-4}-(CH_2)_{1-4}-R_{C\text{-heteroaryl}}$ where R_{C-4} and $R_{C\text{-heteroaryl}}$ are as defined above, or

(K) $-R_{C'}\text{-aryl}$ where $R_{C'}\text{-aryl}$ is as defined above,

and where R_{C-3} is:

(A) $-H$,

(B) $-C_1-C_6$ alkyl,

(C) $-R_{C'}\text{-aryl}$ where $R_{C'}\text{-aryl}$ is as defined above,

(D) $-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(E) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(F) $-(C_1-C_4 \text{ alkyl})-R_{C'}\text{-aryl}$ where $R_{C'}\text{-aryl}$ is as defined above,

- (G) $-(C_1-C_4 \text{ alkyl})-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above, or
- (H) $-(C_1-C_4 \text{ alkyl})-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,
- (IX) $-\text{CH}(\phi)_2$,
- (X) $-\text{cyclopentyl}$ or $-\text{cyclohexyl}$ ring fused to a phenyl or heteroaryl ring where heteroaryl is as defined above and phenyl and heteroaryl are unsubstituted or substituted with one, two or three:
- (A) C_1-C_3 alkyl,
- (B) $-\text{CF}_3$,
- (C) $-\text{F}$, Cl , $-\text{Br}$ and $-\text{I}$,
- (D) C_1-C_3 alkoxy,
- (E) $-\text{OCF}_3$,
- (F) $-\text{NH}_2$,
- (G) $-\text{OH}$, or
- (H) $-\text{C}\equiv\text{N}$,
- (XI) $-\text{CH}_2-\text{C}\equiv\text{CH}$;
- (XII) $-(\text{CH}_2)_{0-1}-\text{CHR}_{C-5}-(\text{CH}_2)_{0-1}-\phi$ where R_{C-5} is:
- (A) $-\text{OH}$, or
- (B) $-\text{CH}_2-\text{OH}$;
- (XIII) $-\text{CH}(-\phi)-\text{CO}-\text{O}(C_1-C_3 \text{ alkyl})$;
- (XIV) $-\text{CH}(-\text{CH}_2-\text{OH})-\text{CH}(-\text{OH})-\phi-\text{NO}_2$;
- (XV) $-(\text{CH}_2)_2-\text{O}-(\text{CH}_2)_2-\text{OH}$;
- (XVI) $-\text{CH}_2-\text{NH}-\text{CH}_2-\text{CH}(-\text{O}-\text{CH}_2-\text{CH}_3)_2$;
- (XVII) $-(C_2-C_8 \text{ alkynyl})$; or
- (XVIII) $-\text{H}$; or a pharmaceutically acceptable salt thereof.

101. (New) The method of claim 100, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 0.1nM to about 200μM.

102. (New) The method of claim 101, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 10nM to about 100μM.

103. (New) The method of claim 101, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 100nM to about 50μM.

104. (New) The method of claim 103, wherein said compound inhibits 50% of the enzyme's activity at a concentration of from about 1μM to about 10μM.

105. (New) The method of claim 100, wherein said therapeutic amount is in the range of from about 0.1 to about 1000 mg/day.

106. (New) The method of claim 100, wherein said therapeutic amount is in the range of from about 15 to about 1500 mg/day.

107. (New) The method of claim 106, wherein said therapeutic amount is in the range of from about 1 to about 100 mg/day.

108. (New) The method of claim 107, wherein said therapeutic amount is in the range of from about 5 to about 50 mg/day.

109. (New) The method according to claim 100, wherein the compound is

N-[(1*S*, 2*S*, 4*R*)-1-(3,5-Difluorobenzyl)-4-(*syn*, *syn*)-(3,5 dimethoxycyclohexylcarbamoyl)-2-hydroxyhexyl]-*N,N*-dipropylisophthalamide,

6-[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-hexanoic acid,

5-[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-pentanoic acid,

4-[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-butyric acid,

3-[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-propionic acid,

8-[6-(3,5-Difluorophenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxyhexanoylamino]-octanoic acid,

8-[6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoylbenzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-octanoic acid methyl ester,

N-[4-(*R*)-Butylcarbamoyl-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-isobutylcarbamoyl-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-Benzylcarbamoyl-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-(Cyclohexylmethyl-carbamoyl)-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-(piperidine-1-carbonyl)-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-4-(*R*)-(2-dimethylamino-ethylcarbamoyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-(Butyl-methyl-carbamoyl)-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-(3-hydroxy-propylcarbamoyl)-hexyl]-*N,N*-dipropyl-isophthalamide,

4-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid methyl ester,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-4-(*R*)-(3-dimethylamino-propylcarbamoyl)-2-(*S*)-hydroxy-hexyl]-*N,N*-dipropyl-isophthalamide,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-2-(*R*)-methyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-2-(*R*)-propyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxyl-2-(*R*)-isobutyl-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([2-(*R*)-Benzyl-6-(3,5-difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-benzoylamino)-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-5-methyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid,

4-(*anti*)-([6-(3,5-Difluoro-phenyl)-5-(*S*)-(3-dipropylcarbamoyl-5-methyl-benzoylamino)-2-(*R*)-ethyl-4-(*S*)-hydroxy-hexanoylamino]-methyl)-cyclohexanecarboxylic acid methyl ester,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-(2-morpholin-4-yl-ethylcarbamoyl)-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-isobutylcarbamoyl-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-(2-Diethylamino-ethylcarbamoyl)-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-[(tetrahydro-furan-2-ylmethyl)-carbamoyl]-pentyl)-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-(Adamantan-2-ylcarbamoyl)-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-methyl-5-morpholin-4-yl-5-oxo-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[4-(*R*)-Benzylcarbamoyl-1-(*S*)-(3,5-difluoro-benzyl)-2-(*S*)-hydroxy-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-4-(*R*)-(4-fluoro-benzylcarbamoyl)-2-(*S*)-hydroxy-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-phenethylcarbamoyl-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide,

N-[1-(*S*)-(3,5-Difluoro-benzyl)-4-(*R*)-[(furan-2-ylmethyl)-carbamoyl]-2-(*S*)-hydroxy-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide, or

N-[1-(*S*)-(3,5-Difluoro-benzyl)-2-(*S*)-hydroxy-4-(*R*)-(prop-2-ynylcarbamoyl)-pentyl]-5-methyl-*N,N*-dipropyl-isophthalamide.